

1851. *Verneuilina Bronni*, *Reuss*, Nat. Abhandl. iv. pl. 5. f. 2. [*V. triquetra*, *Münst.*]
 „ *Verneuilina dubia*, *Reuss*, Nat. Abhandl. iv. pl. 5. f. 3. [*Tritaxia*, *Reuss.*]
 „ *Gaudryina Ruthenica*, *Reuss*, Nat. Abhandl. iv. pl. 5. f. 4. [*Sagrina*, *D'Orb.*]
 „ *Gaudryina siphonella*, *Reuss*, Zeitsch. Deutsch. Geol. Ges. iii. pl. 5. f. 40-42. [*Sagrina*, *D'Orb.*]
 „ *Grammostomum dilatatum*, *Reuss*, Zeitsch. Deutsch. Geol. Ges. iii. pl. 8. f. 8. [*G. capreolus*, *D'Orb.*]
 1854. *Nodosaria rustica*, *Jones*, *Morris's Cat. Brit. Foss.* 2nd. edit. p. 38. [*Clavulina communis*, *D'Orb.*; a *Clavuline Verneuilina.*]
 „ *Verneuilina Muensteri*, *Reuss*, *Denks. Wien*, vii. pl. 26. f. 5. [*V. triquetra*, *Münst.*]
 „ *Polymorphina silicea*, *Schultze*, *Org. Polyth.* pl. 6. f. 10, 11. [*Verneuilina polystropha*, *Reuss.*]
 1857. *Bulimina arenacea*, *Williamson*, *Brit. Foram.* pl. 5. f. 136, 137. [*Verneuilina polystropha*, *Reuss.*]
 „ *Bulimina tuberculata*, *Egger*, *N. Jahrb.* 1857, p. 284, pl. 12. f. 4-7. [*Verneuilina polystropha*, *Reuss.*]
 „ *Bulimina pygmæa*, *Egger*, *N. Jahrb.* 1857, p. 284, pl. 12. f. 10, 11. [*Verneuilina*; smooth, inflated, twisted.]
 1860. *Tritaxia tricarinata*, *Reuss*, *Sitz. Akad. Wien*, 1860, vol. xl. p. 83, pl. 12. f. 1, 2. [*Verneuilina*, with central aperture.]

XIV.—On the Genera and Species of Recent Brachiopods found in the Seas of Japan. By ARTHUR ADAMS, F.L.S. &c.

THE result of my investigations into the geographical distribution of the Terebratulidæ in Japanese waters shows that the North-European, the North-Asiatic, and the Indo-Pacific provinces require to be united as regards these Mollusks. Besides *Waldheimia Grayi*, *Terebratulina Japonica*, and *Terebratella Coreanica*, the North-Asiatic province yielded me *Waldheimia cranium*, *W. septigera*, and *Terebratulina caput-serpentis*. I likewise obtained *Waldheimia picta*, *Terebratulina Cumingii*, and *Ismenia sanguinea*, which were supposed to be confined to the Indo-Pacific province.

Fam. Terebratulidæ.

Subfam. TEREBRATULINÆ.

Genus TEREBRATULINA, D'Orb.

1. *Terebratulina Japonica*, Sow.

Hab. Gotto; 48 fathoms. Tsusaki; 55 fathoms.

2. *Terebratulina caput-serpentis*, Linn.

Hab. Tsusaki; 55 fathoms. Tsu-Sima; 26 fathoms. Mino-Sima; 63 fathoms.

3. *Terebratulina Cumingii*, Davids.

Hab. Tsu-Sima ; 26 fathoms. Mino-Sima ; 63 fathoms.

Genus WALDHEIMIA, King.

1. *Waldheimia cranium*, Gmel.

Hab. Kuro-Sima ; 35 fathoms.

2. *Waldheimia septigera*, Lovén.

Hab. Satanomosaki ; 55 fathoms.

3. *Waldheimia picta*, Chem.

Hab. Satanomosaki ; 55 fathoms.

4. *Waldheimia Grayi*, Davids.

Hab. Hakodadi ; Mososeki ; 7 fathoms.

Subfam. MAGASINÆ.

Genus TEREBRATELLA, D'Orb.

1. *Terebratella Coreanica*, Adams & Reeve.

Hab. Hakodadi ; 7 fathoms. Straits of Korea ; 48 fathoms.

This is *T. miniata*, Gould.

2. *Terebratella Mariae*, A. Adams ('Annals,' 1860).

Hab. Uraga ; 21 fathoms. Gotto ; 48 fathoms. Satanomosaki ; 55 fathoms.

The only species at all resembling this is *T. Spitzbergensis*, described by Davidson in the 'Annals' for 1852, and founded on a single specimen in the Cumingian collection.

Genus ISMENIA, Gray.

1. *Ismenia sanguinea*, Chem.

Hab. Mino-Sima ; 63 fathoms.

2. *Ismenia Reevei*, A. Adams.

I. testa suborbiculari, globoso-lenticulari, punctata, alba, lævi, nitida, ad umbones acuminata, marginibus regulariter arcuatis ; valva ventrali ventricosa, dorsali planiuscula ; foramine modico, integro, circulari.

Hab. Gotto ; 48 fathoms.

A large pure-white species, conspicuously punctate. The loop is trebly attached, as in *Megerlia* ; but the shell externally has the aspect of *Terebratella*.

Fam. Rhynchonellidæ.

Genus RHYNCHONELLA, Fischer.

1. *Rhynchonella lucida*, Gould.

Hab. Satanomosaki; 55 fathoms. Gotto; 48 fathoms.

Dr. Gould observes that this species might be taken for a small *T. vitrea*, but is very thin and delicate, and further distinguished by the absence of punctures. His examples were dredged off the Japan coast, 30° 35' N., 130° 40' E., in 110 fathoms sand, by Capt. Stevens, of the 'Hancock.'

2. *Rhynchonella Woodwardii*, A. Adams.

R. testa subtrigonulari, tumida, nigricante, semiopaca; valvis subæqualibus, impunctatis, concentrice striolatis; umbone rostriformi, parvo, curvato, apice acuto; margine ventrali rotundato, in medio producto.

Hab. Rifunsiri; 35 fathoms. Gotto; 48 fathoms.

This species differs from *R. psittacea* in being concentrically striolate instead of radiately grooved; the beak, moreover, is smaller and less curved; the form is more broadly triangular, and the ventral margin is rounded and produced in the middle. The young possess the same characters seen in more adult specimens.

Fam. Craniidæ.

Genus CRANIA, Retzius.

Crania Japonica, A. Adams.

C. testa crassa, solida, suborbiculari; valva superiore convexa, rugosa, apice elato, subcentrali; margine irregulari; impressionibus muscularibus validis, rotundatis, apophysi interna bifurcata, prominente; impressione pallii multilobata.

Hab. Gotto Islands; 71 fathoms.

A very distinct and well-marked species, with the bifurcate process in the upper valve very prominent and conspicuous.

Fam. Discinidæ.

Genus DISCINA, Lamarek.

Discina stella, Gould.

Hab. Seto-Uchi (Akasi); 17 fathoms. Tsu-Sima; 17 fathoms. Tabu-Sima; 26 fathoms, on coral. Tsu-Sima; 25 fathoms.

Fam. Lingulidæ.

Genus LINGULA, Brug.

1. *Lingula tumidula*, Reeve, Conch. Icon. sp. 2.

Hab. Tsaulian; 7 fathoms, mud.

2. *Lingula smaragdina*, A. Adams.

L. testa oblonga, lateribus rectiusculis, ad umbones attenuata, ad marginem ventralem subtruncata; carina dorsali valida, prominente; glabra, nitente, viridissima.

Hab. Yobuko; 10 fathoms, mud.

A bright green species, found also in the China Sea, and most nearly resembling *L. hirundo*, Reeve.

3. *Lingula jaspidea*, A. Adams.

L. testa oblongo-ovali, lateribus convexis, ad umbones subdilatata; margine ventrali arcuato; carina dorsali mediocri, subdepressa; glabra, nitente, subviridi-lutescente, antice pallidiore, rufo-fusco tincta.

Hab. Mososeki; 7 fathoms, mud.

4. *Lingula lepidula*, A. Adams.

L. testa oblongo-ovali, umbonibus acutis, productis, lateribus convexis, dilatatis, membranaceis; margine ventrali rotundato; carina dorsali depressa; glabra, nitente, luteo-cornea, in medio albida.

Hab. Seto-Uchi (Akasi); 10 fathoms, mud.

A species as small as *L. semen*, and shaped like *L. ovalis*.

XV.—*A Contribution to the Knowledge of the Tæniæ.*

By LUDWIG STIEDA*.

OF the numerous Cestodea forming the group of the *Tænioidea*, scarcely any except the cystic *Tæniæ* have hitherto been particularly investigated in respect to the generative organs, the other *Tæniæ* having received little attention. The different forms, however, as has already been shown by Pagenstecher's description of the several organs of *Tænia microsoma*†, present very peculiar structures, differing in many parts from the arrangement of the sexual organs occurring in the cystic *Tæniæ*; and these are of more importance inasmuch as the different structure of the generative organs will enable us to found a more certain and natural classification of the innumerable *Tænioidea* than has hitherto been possible. For this reason I hope that the present short communication, in which I have endeavoured to describe the generative organs of certain *Tæniæ*, some of them unknown, others imperfectly known, will not be entirely destitute of interest.

In the small intestine of the Field-Mouse (*Hypudæus arvalis*)

* Translated by W. S. Dallas, F.L.S., from Wiegmann's Archiv, 1862, p. 200.

† Zeitschr. für wiss. Zool. ix. p. 523.